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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,390	05/18/2005	Nigel Paul Schofield	M02B151	4420
20411 7590 08/20/2007 THE BOC GROUP, INC. 575 MOUNTAIN AVENUE MURRAY HILL, NJ 07974-2064			EXAMINER FAYYAZ, NASHMIYA SAQIB	
			ART UNIT 2856	PAPER NUMBER
			MAIL DATE 08/20/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/535,390

Applicant(s)

SCHOFIELD ET AL.

Examiner

Nashmiya S. Fayyaz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 7/23/07.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 and 31-41 is/are pending in the application.
- 4a) Of the above claim(s) 7-14, 18-23, 32-34, 36-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 15-17, 24-28, 31, 35, 40-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 5/18/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Species I in the reply filed on 7/23/07 is acknowledged. The traversal is on the ground(s) that claims 26-28 should be generic. This is found persuasive and therefore claims 26-28 will be rejoined.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 7-14, 18-23, 32-34, 36-37, and 38-39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 7/23/07.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6, 15, 17, 25, 26, 31 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by GB 1416168-Frankl. As to claim 1, Frankl discloses a test apparatus and method by which it is used including testing the governor of a

fuel pump with a control rod 13 moved by the governor by generating a predetermined test condition (generating a pump speed from a initial low value to a high value) and obtaining signals indicative of a condition (recording the relative variation of the voltage as the pump speed is varied), see page 1, lines 10 et seq. As to claims 2-6, the abnormal load and reduction of clearance being cause by the increase and decrease in rotational speed of the pump 12 via rotor 14 and shaft which interconnects with coupling 11 and fuel pump 12. As to claim 15, recorder 17 works to store the signals. As to claim 17, the hysteresis loop is drawn as an analysis. As to claim 25, the recorder would inherently include a display. As to claim 26, it is indicated that the coupling automatically adjusts itself to reduce the speed if it is necessary, see page 2, lines 1-11. As to claims 31 and 35, Frankl discloses an apparatus including a pump (12), pump controller (motor 10, coupling 11, rotor 14) and sensing device (linear transducer 18) where the pump controller controls the pump speed, see figure and pages 1 and 2.

5. Claims 1-3,15-17, 24, 25, 27, 28, 31, 35 and 40-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Gopalakrishnan et al- US Patent # 6,536,271 As to claims 1-3 and 27, Gopalakrishnan et al disclose a pump and method of integral fluid monitoring including generating a predetermined test condition (operating the pump 10 at a flowrate) and obtaining signals indicative of the condition of the pump 10 (taking measurements with sensors 50a and 50b) to

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establish a differential for input to an algorithm for comparison to a flow constant and outputting the fluid flow rate, see col. 2, lines 32-61. As to claims 15-17 and 40-41, note Fig. 4, where WINS node 71 calculates flow for routing to data storage devices or external sites such as LAN, see col. 5, lines 19-54. As to claims 24 and 25, the results are sent to a portable data logger or viewer 73 for hand-held usage and in "human-intelligible" format, see col. 2, lines 49-56. As to claim 28, the pressure sensors are placed at predetermined intervals (270 degrees) apart. As to claim 31, Gopalakrishnan et al disclose a pump 10, pump controller (WINS controller 74), and sensing device (sensors 50a/b), see figs. 1 and 4. As to claim 35, note col. 5, lines 44-45 describing the speed control of the pump.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 15, it is unclear what "apparatus" is being referred to and the claim lacks a period.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nashmiya S. Fayyaz whose telephone number is 571-272-2192. The examiner can normally be reached on Mondays and Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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nf  
8/13/07



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